

NLTUA OPERATIONS REPORT – October 2015

TO: Chris Holton, NLTUA

FROM: Marcus Evans, CH2M HILL OMI

DATE: November 12, 2015

COPY: Kevin Dahl, CH2M HILL OMI

Liz Hart, CH2M HILL OMI

This report describes our activities during the month of October 2015. If you require additional information that would make these monthly reports more useful to you, please let us know. Permit compliance report data is being submitted to the State of Michigan electronically. The discharge monitoring report can be viewed at https://miwaters.deg.state.mi.us/miwaters

Treatment Plant

Total Influent Flow Daily Average = 50,118 GPD Last Month = 53,899 Last Year = 55,089

Total Electrical Usage Monthly = 19,758 Kw Hr. Last Month = 19,345 Last Year = 18,620

We had noticed that our reject pump times had been steadily climbing over the last few weeks of September. On Thursday 10/1/15, we air blasted the reject line. It took some extra effort, but after some time we were able to clear a blockage. We will monitor the reject pump run times to verify that this course of action remedied the problem.

We are continuing to back off on the ferric feed as our flows decrease. We will do this incrementally to closely monitor the plant's reaction to this chemical reduction. We also lowered the recycle rate for the plant and are now operating the pumps at 23Hz.

On Saturday 10/3/15, Steve Smiley was in to check the wind generator and noticed water coming from under the garage door. The water was coming from the RPZ backflow preventer vent. We were able to talk Steve through the process of shutting down the water supply on the phone. We arrived shortly after and cleaned up all of the water and began the process of drying out. Contacted Chris Holton and R.A.M. Backflow services to repair the faulty vent. On Tuesday 10/6/15, the backflow preventer was repaired and city water was restored to the plant. On Wednesday 10/14/15, RAM plumbing returned to the WWTP because the RPZ backflow began to drip again. He cleaned out the relief vent diaphragm. We will continue to monitor the RPZ to verify that it's proper operation.

On Tuesday 10/13/15, we were called out to the WWTP early in the morning hours due to a recycle pump failure. The recycle pump failure was caused by a power bump. After putting the recycle pump back in service, we verified that the plant had returned to its normal operational flow before departing.

Lift Stations / Collection system (Including Residential Grinder Pump Stations)

On Monday 10/5/15, we noticed that we didn't have any runtime on Pump #2 at the main lift station. On Tuesday 10/6/15, we performed some diagnostic testing and determined that the pump is indeed running, but the hours meter has failed. The replacement hours meter has been ordered and will be

installed as soon as it arrives. On Wednesday 10/14/15, we replaced the faulty hours meter on Main Lift Station Pump #2 with a new identical meter. The new meter is working as it should.

On Sunday 10/11/15, we were called to the 7th street Lift Station for a high well alarm. Upon arrival, we discovered that we were missing a line voltage phase from Consumers due to a tree falling on the lines. We stayed at the station and monitored the wet well level in preparation to pump it down using the portable generator. Once power was restored, we verified that the lift station was operating properly before departure.

On Thursday 10/15/15, we began our annual manhole inspections in preparation to flush the collection system before winter. We are approximately half done with our annual collection system manhole inspections. I expect the rest to be completed by 11/12/15. At that time, we will determine the needs of the collection system for the remainder of this year.

On the Horizon

- Return Blower #2 to service and inspect after significant runtime.
- Have Blower #1 rebuilt hopefully onsite.
- Sewer inspections and flushing
- Replace light on basin.
- Northport Point Lift station alarm dialer replacement.
- Effluent Flow meter design, spec and installation.
- Settling basin cleaning
- Weed control on the Rapid Infiltration Beds in the spring

Budget Items

October-15

| Repairs Spending Treatment Plant & Collection System | \$1,278.79 |
|---|-------------|
| Repairs Spending Treatment Plant & Collection System Year to Date | \$20,696.52 |
| Repairs Spending Residential Grinder Pumps | \$1,129.13 |
| Repairs Spending Residential Grinder Pumps Year to Date | \$10,603.39 |
| Repair Hours Residential Grinder Pumps | 0 |
| Repair Hours Residential Grinder Pumps Year to Date | 186.5 |
| Repair Hours Treatment Plant | 0 |
| Repair Hours Treatment Plant Year to Date | 63 |
| Repair Hours Collection System (lift stations/sewer) | 2.6 |
| Repair Hours Collection System (lift stations/sewer) Year to Date | 35 |

| Total Repair Hours Year to Date | 284.5 |
|---|-------------|
| Total Repair Spending Year to Date | \$31,299.91 |

| Total Repair Hours Year to Date in 2014 | 397.5 |
|---|-------------|
| Total Repair Spending Year to Date in 2014 | \$26,402.72 |

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These budget numbers are an estimate.

If you have any questions or concerns please feel free to contact me.

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